

Notice of Allowability

Application No.

09/911,780

Examiner

Jean E. Lesperance

Applicant(s)

NAKANO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed March 14, 2006.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12-19-03, 7-23-04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

DETAILED ACTION

1. The amendment filed March 14, 2006 and claims 1-8 are pending.

Allowable Subject Matter

2. Claims 1 to 8 are allowed.
3. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a plurality of column electrode driving circuits in a matrix type display including a plurality of row electrode driving circuits connected in series.

Independent claim 1 identifies a uniquely distinct feature "each of the plurality of column electrode driving circuits comprising: a data input section, a timing control section, a selection section, and a data output section, wherein the data input section of a second column electrode driving circuit of the plurality of column electrode driving circuits is connected to the data output section of a first column electrode driving circuit of the plurality of column electrode driving circuits, and the data output section of the second column electrode driving circuit is connected to the data input section of a third column electrode driving circuit of the plurality of column electrode driving circuits".

Independent claim 5 identifies a uniquely distinct feature "a timing signal for controlling an operation timing of the plurality of column electrode driving circuits and the plurality of row electrode driving circuits is generated in the first column electrode driving circuit, and the generated timing signal and a data signal are output to a second

column electrode driving circuit, among the plurality of column electrode driving circuits, which is directly connected to the first column electrode driving circuit”.

Independent claim 6 identifies a uniquely distinct feature “a first column electrode driving circuit, among the plurality of column electrode driving circuits, which is closest to the plurality of row electrode driving circuits, generates a timing signal for controlling an operation timing of the plurality of column electrode driving circuits and the plurality of row electrode driving circuits, generates a timing signal for controlling an operation timing of the plurality of column electrode driving circuits and the plurality of row electrode driving circuits, and outputs the generated timing signal to a first row electrode driving circuit, among the plurality of row electrode driving circuits, which is closest to the first column electrode driving circuit as a scanning signal”.

Independent claim 7 identifies a uniquely distinct feature “wherein a timing signal for controlling the plurality of row electrode driving circuits is supplied to one of the plurality of row electrode driving circuits sequentially through a second line portion provided on the printed circuit board, a third line portion provided on one of the plurality of column electrode driving circuits, and a fourth line portion provided on the display panel”.

Independent claim 8 identifies a uniquely distinct feature “a first column electrode driving circuit, among the plurality of column electrode driving circuits, which is closest to the plurality of row electrode driving circuits, generates a timing signal for controlling an operation timing of the plurality of column electrode driving circuits and the plurality of row electrode driving circuits, and outputs the generated timing signal to a first row

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electrode driving circuit, among the plurality of row electrode driving circuits, which is closest to the first column electrode driving circuit as a scanning signal”.

The closest arts, Sasaki et al. as discussed in previous in the Office Action, either singularly or in combination fails to anticipate or render the above underlined limitations obvious.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



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Date 6/8/2006



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600